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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/731,464	12/09/2003	Andreas Grundler	Heraeus 413-WCG	4665

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EXAMINER

YOON, TAE H

ART UNIT PAPER NUMBER

1714

DATE MAILED: 10/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/731,464

Applicant(s)

GRUNDLER ET AL.

Examiner

Tae H. Yoon

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1714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _____ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Typo, diglycidil (diglycidyl), is noted in claims 8 and 11.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3, 7, 10 and 12 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Schaefer (US 5,009,597).

Schaefer teaches the instant photo-curable dental coating material in example 6. The instant surface treated silicon dioxide splinter polymer is taught at col. 4, lines 21-27. Said coating material of Schaefer inherently possesses the recited average dynamic viscosity since the same or similar components are used.

Thus, the invention lacks novelty.

Claims 1, 2, 7 and 12 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Lee, Jr. et al (US 4,150,485).

Lee, Jr. et al teach the instant dental composition and its use in examples. Said dental composition of Lee, Jr. et al inherently possesses the recited average dynamic viscosity since the same or similar components are used.

Thus, the invention lacks novelty.

Claims 1, 2, 7, 10 and 12 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Koblitz et al (US 4,411,625).

Koblitz et al teach the instant dental composition and its use in examples 1-3. Said dental composition of Koblitz et al inherently possesses the recited average dynamic viscosity since the same or similar components are used.

Thus, the invention lacks novelty.

Claims 1-3, 7, 10 and 12 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Stange et al (US 6,881,360).

Stange et al teach the instant photocurable dental coating material in table, col. 5. The instant surface treated silicon dioxide splinter polymer is taught at col. 3, lines 61-67 and col. 4, lines 40-54. Photoinitiator is taught at col. 4, line 8 (camphorquinone is misspelled as champerchinon). Said coating material of Stange et al inherently

possesses the recited average dynamic viscosity since the same or similar components are used.

Thus, the invention lacks novelty.

Claims 1-3, 7, 10 and 12 are rejected under 35 U.S.C. 102(a) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Stange et al (EP 1 243 230 A2).

This is the counterpart of above US 6,881,360.

Thus, the invention lacks novelty.

Claims 1-7, 9, 10 and 12 are rejected under 35 U.S.C. 103(a) as obvious over Stange et al (US 6,881,360 or EP 1 243 230 A2).

The instant invention further recites different amounts of the matrix resin and filler mixture over Stange et al. The mixture 2 of said table contains about 57.8 wt% of the resin and the filler mixture comprising about 38.15 wt% of surface treated silicon dioxide (see also col. 3, lines 44-47) and about 15.8 wt% of splinter filler. Stange et al teach employing various amounts at col. 3, lines 11-27.

It would have been obvious to one skilled in the art at the time of invention to utilize the instant amounts of the matrix resin and surface treated silicon dioxide in the composition of Stange et al since Stange et al teach such modification.

Claims 1-12 are rejected under 35 U.S.C. 103(a) as obvious over Stange et al (US 6,881,360) and Holmes (US 6,030,606).

The instant invention further recites employing bisphenol A diglycidyl acrylate (or glycidyl diacrylate) and trimethylene glycol dimethacrylate and different amounts of components over Stange et al. However, Stange et al teach amounts encompassing the instant amounts at col. 3, lines 11-27 and trimethylene glycol dimethacrylate at col. 3, lines 37-38. Holmes teaches that the use of bisphenol A acrylates and methacrylates is well known in dental art at col. 1, lines 24-32.

It would have been obvious to one skilled in the art at the time of invention to utilize bisphenol A diglycidyl acrylate (or glycidyl diacrylate) and trimethylene glycol dimethacrylate in the composition of Stange et al in amounts claimed in the invention since the use of bisphenol A acrylates and methacrylates in dental composition is well known in the art as taught by Holmes and since a homologue is expected work in the same or similar manner and since Stange et al teach trimethylene glycol dimethacrylate and since choosing the instant amounts from the disclosed amounts of Stange et al is a Stange et al *prima facie* obviousness.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir.

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1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claim 1 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,426,373. Although the conflicting claims are not identical, they are not patentably distinct from each other because the composition of said patent inherently possesses the recited average dynamic viscosity since the same or similar components are used.

Claim 1 is rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Stange et al (US 6,426,373).


Stange et al teach the instant photocurable dental coating material in claim 1. Said coating material of Stange et al inherently possesses the recited average dynamic viscosity since the same or similar components are used.

Thus, the invention lacks novelty.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tae H. Yoon whose telephone number is (571) 272-1128. The examiner can normally be reached on Mon-Thu.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Tae H Yoon
Primary Examiner
Art Unit 1714

THY/September 28, 2006